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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,095	10/31/2003	Donald W. Verser	210441US (CPCM:0016/FLE)	2662
7590 Michael G. Fletcher Fletcher Yoder P. O. Box 692289 Houston, TX 77269-2289			EXAMINER LU, C CAIXIA	
			ART UNIT	PAPER NUMBER
			1713	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/27/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/699,095

Applicant(s)

VERSER ET AL.

Examiner

Caixia Lu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1, 15, 28-31, 33 and 36-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 15, 28-31, 33 and 36-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to: See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Claim Rejections - 35 USC § 103***

2. Claims 1, 15, 28-31, 33 and 36-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kendrick et al. (US 6,204,344) in view of Hanson (US 5,597,892) for the same rationale as set forth in the previous Office action mailed August 14, 2006.
3. Claims 1, 15, 28-31, 33 and 36-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tormaschy et al. (EP 0 432 555 A2) in view of respectively Hanson (5,597,892) and Hanson et al. (US 4,424,341) for the same rationale as set forth in the previous Office action mailed August 14, 2006.

#### ***Response to Arguments***

4. Applicant's arguments filed December 18, 2006 have been fully considered.

The rejection under 35 U.S.C. 112, first paragraph is withdrawn because applicants have indicated the support. However, it is the examiner's position that the current pending claims are only support by the specification of the current application rather than fully supported by the specification of a parent, Hottovy (US 6,239,235), which includes the incorporated Hanson (US 4,424,341). Hottovy's specification only disclosed an olefin polymerization process, and the monomer polymerization process without the any limitation to the monomer is only disclosed in the current specification.

Applicants assert that Kendrick et al. (US 6,204,344) is not prior art. The examiner disagrees. As indicated in the Office Action mailed August 14, 2006, the

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instant claims are not supported in the cited sections of Hottovy and Hanson'341 because the process disclosed in Hottovy together with Hanson'341 requires separation of the polymer slurry intermediate product by a flash tank first and then further separates the liquid portion of the polymer slurry by a cyclone rather than separating the polymer slurry intermediate product in a cyclone directly as required by claims 1, 15, 28-31, 33 and 36. Applicants argue that Hanson'341 provides for the immediate processing of the concentrated intermediate slurry via placement of cyclone 25 inside the flash chamber (rather than being connected to the flash chamber by a conduit). However, a skilled artisan would have understood that Hanson'341 cyclone is only for separating the small amount of entrained polymer particles in the vaporized diluent regardless where the cyclone is located, inside or outside of the flash chamber, while the majority of concentrated the polymer slurry is separated in the flash chamber of the flash tank, see Hanson'341, col. 3, lines 15-25, and col. 4, lines 9-12. Without the polymer slurry being entering the flash tank directly and being separated there, only minor amount of entrained polymer particles product would be obtained from the cyclone separation. Apparently, Hottovy and Hanson'341 together does not support the instant claims which requires separating the concentrated intermediate main product by a cyclone, and therefore Kendrick is deemed to be proper prior art.

Mr. John D. Hottovy's Declaration under 37 CFR 1.132 declaring the withdrawal of polymer slurry in polymerization process disclosed EP 0 432 555 being discontinuous is noted. While Mr. John D. Hottovy asserts that the discontinuous withdrawal is conducted via the settling leg configuration. However, there is no mentioning of settling

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legs throughout the text of EP 0 432 555 and there is no showing of settling leg in Fig. 1 of EP 0 432 555 regarding the design of the loop reactor as well. On the contrary, EP 0 432 555 describes "[t]he reaction effluent is withdrawn from reactor 11 through conduit 23 and is passed to the flash tank 25", see page 5, lines 40-41. Such a description does not differ from the disclosure of continuously withdrawal process of the instant application. Furthermore, in Example of EP 0 432 555, a polymer withdrawn rate of 1,635 lbs/hr is disclosed, and the polymer withdrawn rate in absence of description of a batch process is for a continuous process which is always sort after for economical reasons in industry. Because the disclosure of EP 0 432 555 shows a continuous withdrawn process contrary to Mr. John D. Hottovy's Declaration, the rejections over Tormaschy et al. (EP 0 432 555 A2) in view of respectively Hanson (5,597,892) and Hanson et al. (US 4,424,341) are stilled deemed proper and thus maintained.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Caixia Lu whose telephone number is (571) 272-1106. The examiner can normally be reached from 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful and the matter is urgent, the examiner's supervisor, David Wu, can be reached at (571) 272-1114. The fax numbers for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1700.



Caixia Lu, Ph. D.  
Primary Examiner